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(54) Personal communications network for flexible traffic demand

(57) Consisting of a set of base stations (BS) that provide coverage, via radio, for cordless terminals situated in a determined area, in such a way that said base stations (BS) are connected to a certain number of base station controllers (BSC) which serve to manage the radio channels available for this network.

The physical connections between the base stations (BS) and the base station controllers (BSC) are established dynamically by means of a link allocation device (LAD), as a function of the traffic load on each base station (BS) and on the degree of occupancy of each base station controller (BSC). This permits the network resources to be dimensioned as a function of the total traffic demand instead of the traffic demands by areas, the sum of which, being much greater than the total demand, implies the underemployment of the resources for the greater part of the time.

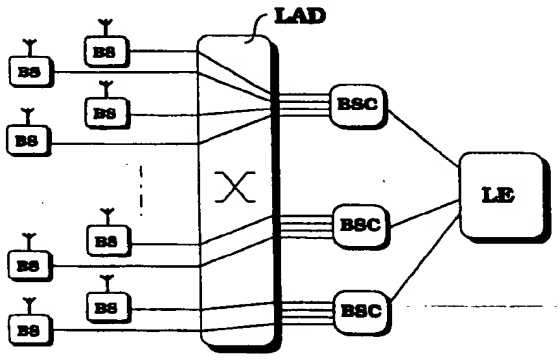

FIG. 2

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work, characterised in that the connections between the base stations (BS) and the base station controllers (BSC) are formed dynamically by means of a link allocation device (LAD) as a function of the traffic load of each base station controller (BSC).

2. **COMMUNICATIONS NETWORK** according to claim 1, characterised in that the link allocation device (LAD) includes channel occupancy tables that indicate for each base station controller (BSC) which channels are occupied and via which base station (BS) the communication with the cordless terminals (CT) is being made.

3. **COMMUNICATIONS NETWORK** according to claim 2, characterised in that when a first base station controller (BSC) reaches a determined number of occupied channels and there is a second base station controller (BSC) with a lower number of occupied channels, the link allocation device (LAD) establishes a new link between one of the base stations (BS) managed by the first base station controller (BSC) and the second base station controller (BSC), clearing the link existing between this base station (BS) and the first base station controller (BSC).

4. **LINK ALLOCATION DEVICE** (LAD) for connection between a set of base stations (BS) and a set of base station controllers (BSC) in a cordless communications network characterised in that it establishes connections between each base station controller (BSC) and a variable number of base stations (BS) depending on the traffic load of each base station controller (BSC).

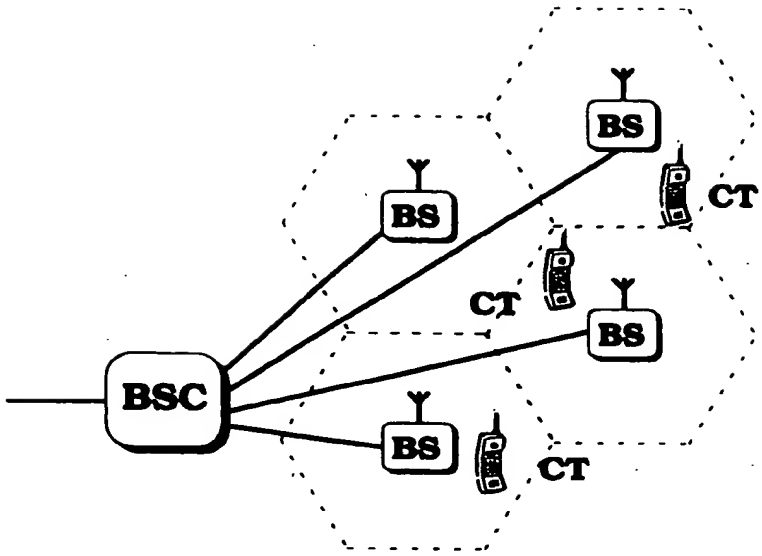

FIG. 1

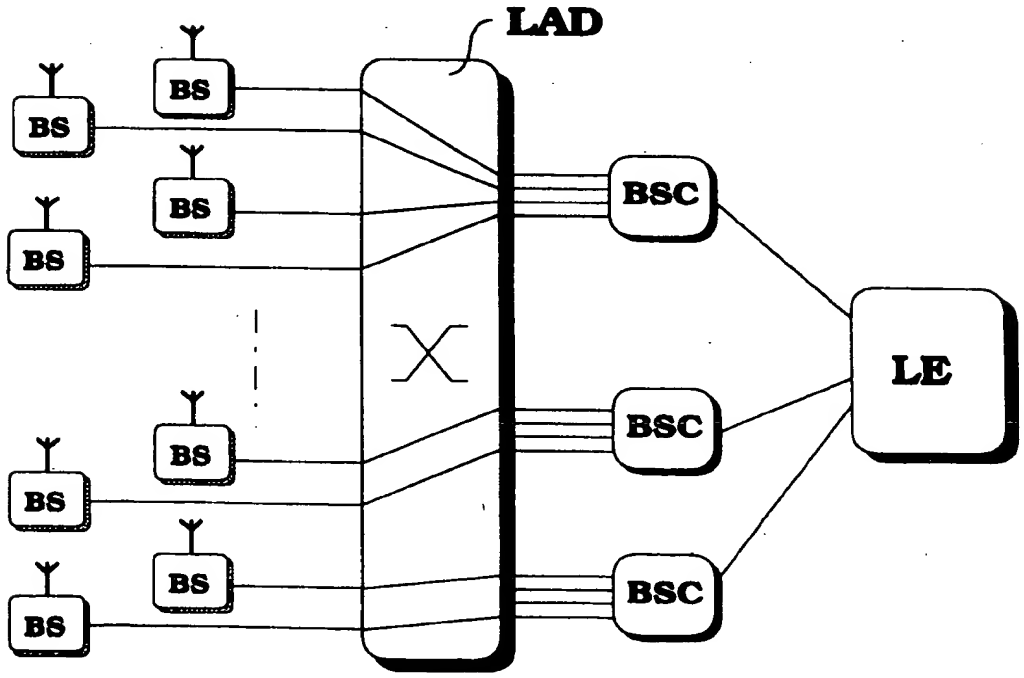

FIG. 2

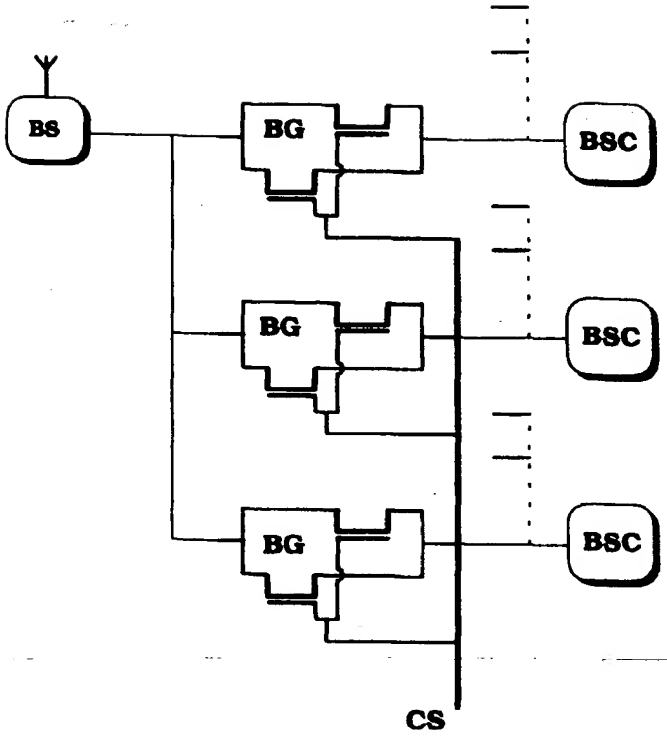

FIG. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 97 40 0265

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	WO 94 00959 A (NOKIA TELECOMMUNICATIONS OY ;TAHKOKORPI MARKKU (FI)) 6 January 1994 * abstract * * page 8, line 4 - line 7 * * page 8, line 18 - line 21 * * page 8, line 32 - page 9, line 3 * * figure 2 *	1,2,4	H04Q7/30
A	EP 0 534 716 A (NIPPON ELECTRIC CO) 31 March 1993 * abstract * * column 3, line 24 - column 4, line 8 * * figure 4 *	1-4	
A	US 5 454 026 A (TANAKA SHOJI) 26 September 1995 * abstract * * column 2, line 9 - line 38 * * column 4, line 57 - column 5, line 35 * * figure 1 *	1-4	

TECHNICAL FIELDS SEARCHED (Int.Cl.6)

H04Q

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	16 July 1997	Lindhardt, U

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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